Reply to Office action of September 29, 2004

ARGUMENTS/REMARKS

Applicants would like to thank the examiner for the careful consideration given the nrecent application. The application has been carefully reviewed in light of the Office action, and amended as necessary to more clearly and particularly describe and claim the subject matter which applicants regard as the invention.

The Examiner requested that titles be added to the specification, and that reference to specific claims be removed. Amendments to the specification have been provided to comply with these requests. Applicant notes, however, that the suggested title formats are merely suggestions, and not mandatory.

Claims 1-15 remain in this application. The examiner has acknowledged that claim 2 would be allowable if put into independent format. New claim 16 is basically claim 2 put into independent format, and thus should be allowable.

Claims 1, and 3-15 were rejected under 35 U.S.C. §102(e) as being anticipated by Feng *et al.* (U.S. Pub. Pat. App. 2001/0031053). For the following reasons, the rejection is respectfully traversed.

Claim 1, as amended, recites a method for "analyzing an acoustical environment comprising acoustical sources located in respective angular directions and at respective radial distances with respect to at least two reception locations", including the steps of

- registering acoustical signals at said at least two reception locations mutually distant by a given reception distance and generating at least two respective first electric signals representing said acoustical signals;
- calculating electronically, from said first electric signals, at least one of the radial distances of sources of acoustical signals in said acoustical environment with respect to at least one of said

reception locations, thereby generating a distance signal;

- amplitude filtering said distance signal, thereby generating a patterned distance signal; and
- weighing a signal dependent from at least one of said first signals by said patterned distance signal, thereby generating an output signal representing said acoustical signals from sources distributed in said environment within a radialdistance pattern.

In contrast, the cited reference does not teach any method for "analyzing an acoustical environment comprising acoustical sources located in respective angular directions and at respective radial distances with respect to at least two reception locations".

In particular, Feng does not teach sources located at respective angular directions and radial distances. Instead, Feng merely discusses an azimuth direction, finding sources that are "off axis" from a given angular direction (see Figs. 1-22, see also ¶s [0045]; [0046]; [0060]; [0086]; [0122]; and the examples of ¶s [0158]-[0167]). Nowhere does Feng discuss radial distances. In contrast, the invention of the claims determines radial distances of sources of acoustical signals and generates an output signal from sources distributed within a "radial-distance pattern". The cited reference does not teach any determination of radial distance, but merely determines azimuthal positions. Azimuth is defined as:

1 :an arc of the horizon measured between a fixed point (as true north) and the vertical circle passing through the center of an object usually in astronomy and navigation clockwise from the north point through 360 degrees

2: horizontal direction expressed as the angular distance between the direction of a fixed point (as the observer's heading) and the direction of the object

(see http://www.m-w.com/cgi-bin/dictionary?book=Dictionary&va=azimuth) and thus, by definition, teaches only an angular measurement, not a radial one.

Accordingly, claim 1 is patentable over the reference. Claims 2-8, which depend on claim 1, are thus patentable over the reference for at least the same reason as claim 1.

Claim 9 recites system including a calculating unit with inputs

being operationally connected to said outputs of said converters and generating at an output a signal which is representative of a *distance* of an acoustical source in said environment with respect to one of said acoustical to electrical converters

(emphasis added). As discussed above, the cited reference does not teach determining any "distance" value, and in particular does not teach calculating a distance between an acoustical source and one of the electrical converters. Thus, claim 9 is patentable over the reference. Claims 10-15, which depend, directly or indirectly, on claim 9, are thus patentable over the reference for at least the same reasons as claim 9.

In consideration of the foregoing analysis, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No. 33536.

Respectfully submitted,

PEARNE & GORDON, LLP

Robert F. Bodi, Reg. No. 48,540

1801 East 9th Street Suite 1200 Cleveland, Ohio 44114-3108 (216) 579-1700 February 18, 2005